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09/919565

SS3035USNA

APPEAL BRIEF (9 PAGES)  
TRANSMITTAL FORM

Page 1 of 1

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	09/919565
	Filing Date	July 31, 2001
	First Named Inventor	Vishal Bansal Et. Al.
	Art Unit	1771
	Examiner Name	NORCA LIZ TORRES VELAZQUE
	Attorney Docket Number	SS3035USNA
Total Number of Pages in This Submission		

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below): <div style="border: 1px solid black; height: 40px; width: 100%;"></div>
<b>Remarks</b> The USPTO is authorized to charge a fee of \$500.00 pursuant to 37 CFR 41.20(b)(2) to Appellants' deposit account No. 04-1928.		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm Name	E. I. DU PONT DE NEMOURS AND COMPANY	
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**MAR 07 2005**

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN THE APPLICATION OF:

VISHAL BANSAL ET. AL.

CASE NO.: SS3035USNA

APPLICATION NO.: 09/919,565

GROUP ART UNIT: 1771

FILED: JULY 31, 2001

EXAMINER: NORCA LIZ TORRES  
VELAZQUEZ

FOR: MELTBLOWN WEB

**APPEAL BRIEF UNDER 37 C.F.R. §41.37**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Responsive to the Final Rejection mailed 24 August 2004 as to the above-referenced application, a Notice of Appeal having been filed on 10 January 2005, Appellants submit the following Appeal Brief.

**1. REAL PARTY IN INTEREST**

The present application is assigned to E. I. du Pont de Nemours and Company, 1007 Market Street, Wilmington, Delaware 19898, said assignment being recorded at reel 012264, frame 0546.

**2. RELATED APPEALS AND INTERFERENCES**

Appellants are unaware of any related appeals or interferences.

**3. STATUS OF CLAIMS**

Claims 1-3, 5, 6, 8, 9, 11-14, 24-26, and 28-33 stand finally rejected.

Claims 4, 22, and 23 stand withdrawn due to a restriction requirement in the present application.

Claims 7, 10, 15-21, and 27 have been canceled.

The final rejection of claims 1-3, 5, 6, 8, 9, 11-14, 24-26, and 28-33 is appealed herein.

A copy of the claims is set forth in the Claims Appendix hereto.

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**4. STATUS OF AMENDMENTS**

All amendments have been entered.

**5. SUMMARY OF THE CLAIMED SUBJECT MATTER**

The claimed invention is directed to multiple component meltblown webs (claim 1; specification page 7, line 17, to page 8, line 21) and composite sheets containing such meltblown webs (claim 24; specification, page 8, lines 27-31), wherein the meltblown fibers are multiple component fibers consisting of non-elastomeric polymers. A first polymer component of the fibers is a blend of non-elastomeric polymers selected from the group consisting of various specified polyolefins, polyesters, polyamides, polystyrene, fluoropolymers, olefinic ionomer resins, random co-polymers of ethylene and methacrylic acid, and random co-polymers of ethylene and vinyl acetate, and the second polymer component of the fibers is selected from a single polymer which is either a polyolefin or a polyester.

**6. GROUNDS OF REJECTION TO BE  
REVIEWED ON APPEAL**

I. Claims 1-3, 5, 6, 8, 9, 11-14, 24-26, and 28-33 stand finally rejected as obvious over U.S. Patent No. 5,405,682 (Shawyer et al.) in view of U.S. Patent No. 6,417,121 (Newkirk et al.).

Shawyer et al. disclose multiple component strands having a first component A, which includes a polyolefin, and a second component B, which is a blend of a polyolefin and a thermoplastic elastomeric material (col. 7, lines 3-8).

Newkirk et al. disclose multiple component fibers and fabrics wherein at least one of the polymer domains of the multiple component fibers is a blend of polymers (col. 7, lines 43-44), wherein the multipolymer blend component "is predominantly formed from polymers that normally are considered nonelastic" (col. 7, lines 56-58).

The Examiner asserts that it would have been obvious to formulate component A of Shawyer et al. as a single polyolefin (the second polymer component of the present invention), and to replace the elastomer-containing blend of Shawyer et al.'s component B with the non-elastomer blends of Newkirk et al. (the first polymer component of the presently claimed invention: Final Rejection of 24 August 2004, page 3; Advisory Action of 6 December 2004, page 2), so as to make obvious the presently claimed invention.

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## 7. ARGUMENT

Initially, the Board's attention is directed to the claims of the present application, wherein Appellants claim in part "a multiple component meltblown web... comprised of multiple component meltblown fibers". Appellants submit that neither Shawyer et al. nor Newkirk et al. are specifically drawn to multiple component meltblown fibers according to the present claims.

### Claims 1-3, 5, 6, 8, 9, 11-13, 24-26, and 28-33

#### A. Shawyer et al. Fail to Disclose Multiple Component Meltblown Fibers/Webs

As discussed by the Examiner (Office Action of 2 February 2004, page 2), Shawyer et al. indicate that "[n]onwoven webs may be formed by a variety of processes, such as meltblowing processes, spunbonding processes, film aperturing processes and staple fiber carding processes" (col. 6, lines 35-38).

However, Shawyer et al. never indicate that their inventive webs can be made by meltblowing. The citation of Shawyer et al.'s discussion of the various methods of making nonwoven webs seems to be taken by the Examiner to imply that Shawyer et al. intend to disclose that their inventive fabrics can be meltblown fabrics, within the scope of the present claims. This implication is not supported by the specific language of Shawyer et al. as to how to make their invention.

*The nonwoven fabric of the present invention may be formed from staple multicomponent fibers. Such staple fibers may be carded and bonded to form the nonwoven fabric. Preferably, however, the nonwoven fabric of the present invention is made with continuous spunbond multicomponent filaments...*" (col. 6, lines 20-25; emphasis added).

Further, Shawyer et al. disclose that their inventive fabrics are "particularly suited for use as an outer cover material for personal care articles and garment materials" (col. 5, lines 60-62), such as diapers, incontinence products, medical apparel and the like (col. 5, lines 62-68). Those skilled in the art are well-aware that meltblown nonwoven fabrics do not possess adequate strength for use as such outer covering materials. Even Shawyer et al. disclose that to form medical garments, their inventive multiple component nonwoven fabric is a spunbond fabric used as outer coverings for a conventional meltblown web (col. 13, lines 21-62).

Accordingly, Appellants respectfully submit that Shawyer et al. is irrelevant to the present claims and represents non-analogous art as to the presently claimed invention. As such, Shawyer et al. cannot be combined with another reference and be fairly said to suggest the present invention. Withdrawal of the rejection is requested on this basis alone.

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**B. Proposed Combination Would Destroy the Sawyer et al. Reference**

Sawyer et al. disclose a nonwoven fabric comprised of

extruded multiple component strands including a blend of a polyolefin and a thermoplastic elastomeric polymer as one of the components (col. 5, lines 49-53).

The second, blended component of Sawyer et al. is referred to as "component B", while the first component is referred to as "component A". At column 7, Sawyer et al. disclose a list of suitable polymers for use in their invention. As component A, Sawyer et al. disclose a number of polyolefins, and state:

component A may also comprise other thermoplastic polymers such as polyesters or polyamides. (Col. 7, lines 5-13).

Component B of Sawyer et al. is disclosed as being a blend of a polyolefin and a thermoplastic elastomeric polymer (col. 7, lines 13-26). The thermoplastic elastomers are extensively described beginning at column 7, line 34 and bridging to column 9, line 13. Sawyer et al. disclose that

[t]he thermoplastic elastomeric polymer imparts some give to the bond points between the multicomponent strands and thereby enables the fabric to better distribute stress. As a result, the fabric of the present invention has a higher tensile energy and abrasion resistance while maintaining a high level of softness (col. 5, lines 53-59).

In contrast, the blends of the first polymer component according to the present invention are distinctly non-elastomeric, and consist only of non-elastomeric polymers (claim 1).

In order to address this claim limitation, the Examiner equates Sawyer et al.'s component A with Appellants' second polymer component, and Sawyer et al.'s component B with Appellants' first polymer component. The Examiner opines that it would have been obvious to the skilled artisan to replace the elastomer-containing blends (component B) of Sawyer et al. with non-elastomer blends disclosed by Newkirk et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the polymer components and provide [Sawyer et al.] with nonelastic polymer components [with] the motivation of having better spinning, bonding and strength characteristics to the component and increase the

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abrasion resistance of the components as disclosed by Newkirk et al. (Column 3, lines 26-29 and 49-54). (Final Office Action, 24 August 2004, page 7).

Appellants responded that such a modification would impermissibly destroy the invention of the Shawyer et al. reference, and as such would not have been obvious to the skilled artisan (Appellants' Response of 27 May 2004, page 9).

In response to Appellants' argument, the Examiner responded

[B]y modifying the type of material in the second component B [of Shawyer et al.] by using the non-elastomeric polymers taught by Newkirk *will not destroy the Shawyer et al. reference since there is enough motivation for this modification in the Newkirk reference that will benefit the product of Shawyer et al.* By providing the second component B of Shawyer et al. with nonelastic polymer components the multicomponent polymeric strands produced will have better spinning, bonding and strength characteristics and will increase the abrasion resistance of these. (Final Office Action, page 3; emphasis added).

Appellants respectfully submit that the Examiner's position is contrary to the case law.

If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). MPEP 2143.01

It makes no difference that the Examiner has cobbled-together some arguments to suggest such a substitution, when such proposed substitution would render the prior art invention unsatisfactory for its intended purpose. Appellants request withdrawal of the rejection on this basis alone.

C. Newkirk et al. Polymer Blends Are Outside the Scope of Appellants' Claims

Newkirk et al. disclose multicomponent fibers which include at least two polymer components arranged in structured domains, wherein at least one of the polymer components is a blend of specific grades of polyethylene and polypropylene (col. 3, lines 17-21). Newkirk et al. suggest that their multicomponent fibers can be made from a variety of fiber processing techniques, including carding, spunbonding, wet laying, air laying and meltblowing (col. 5, lines 56-60). As discussed above, the Examiner proposes that it would have been obvious to substitute the blended component of Newkirk et al. for the blended component B of Shawyer et al.

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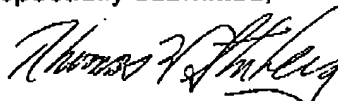
However, even if such a substitution were, *arguendo*, obvious to the skilled artisan, the new fiber composition would not meet the limitations of the present claims. In this regard, the Board's attention is re-directed to the limitations of present claim 1 (and independent claim 24), wherein the blends of the first polymer component are described by a Markush recitation that does not include polypropylene. Accordingly, even if combined, the cited references fail to establish a *prima facie* case of obviousness as to the present claims. Withdrawal of the rejection is requested on this basis.

**Claim 14**

Neither of Shawyer et al. or Newkirk et al. disclose or suggest blended fiber components containing an ionomeric random co-polymer of ethylene and methacrylic acid, as claimed. As such, the cited references cannot be said to establish a *prima facie* case of obviousness as to claim 14.

The Board of Appeals is respectfully requested to remand this application to the Examiner with a direction to allow the claims.

Respectfully submitted,



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Dated: \_\_\_\_\_

3/7/05

TWS:fgl  
Enclosure



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### 8. CLAIMS APPENDIX

1. A multiple component meltblown web comprised of at least 95% by weight of multiple component meltblown fibers having an average effective diameter of less than 10 microns, the multiple component meltblown fibers consisting of non-elastomeric polymers, wherein

a first polymer component is a blend consisting of from 1% to 99% by weight of a first polymer and from 99% to 1% by weight of a second polymer wherein the polymers are non-elastomeric polymers selected from the group consisting of polyethylene, polymethylpentene, copolymers of monomers of ethylene and methylpentene, polyesters, polyamides, polystyrene, fluoropolymers, olefinic ionomer resins, random co-polymers of ethylene and methacrylic acid, and random co-polymers of ethylene and vinyl acetate, and

a second polymer component is a single polymer selected from the group consisting of polyolefin and polyester.

2. The web according to claim 1, wherein the polymers of the first polymer component consist of from 5% to 95% by weight of the first polymer and from 95% to 5% by weight of the second polymer.

3. The web according to claim 2, wherein the polymers of the first polymer component consist of from 10% to 90% by weight of the first polymer and from 90% to 10% by weight of the second polymer.

4. (Withdrawn).

5. The web according to claim 3 wherein the first polymer is selected from the group consisting of polyethylene, polymethylpentene, and copolymers of monomers of ethylene and methylpentene and the second polymer is a polyester.

6. The web according to claim 5 wherein the second polymer is selected from the group consisting of poly(ethylene terephthalate), poly(trimethylene terephthalate), and poly(butylene terephthalate)

7. (Canceled).

8. The web according to claim 1 wherein the second polymer component is a polyester.

9. The web according to claim 8 wherein the first polymer is polyethylene, the second polymer is poly(butylene terephthalate), and the second polymer component is poly(ethylene terephthalate).

10. (Canceled).

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11. The web according to claim 3 wherein the second polymer component is polypropylene.

12. The web according to claim 3 wherein the first polymer is selected from the group consisting of polyethylene, polymethylpentene, and copolymers of monomers of ethylene and methylpentene and the second polymer is an olefinic ionomer resin.

13. The web according to claim 12 wherein the second polymer component is a polyester.

14. The web according to claim 13 wherein the second polymer is an ionomeric random co-polymer of ethylene and methacrylic acid, and the second polymer component is poly(ethylene terephthalate).

Claims 15-21 (Canceled).

22. (Withdrawn).

23. (Withdrawn).

24. A composite sheet comprising:

a first fibrous layer having a first side and an opposite second side;

a second fibrous layer bonded to the first side of the first fibrous layer;

the first fibrous layer being a multiple component meltblown web comprised of at least 95% by weight of multiple component meltblown fibers having an average effective diameter of less than 10 microns, the multiple component meltblown fibers consisting of non-elastomeric polymers of a first polymer component and a second polymer component distinct from the first polymer component, wherein the first polymer component is a blend of non-elastomeric polymers consisting of from 1% to 99% by weight of a first polymer and from 99% to 1% by weight of a second polymer, wherein the first and second polymers are selected from the group consisting of polyethylene, polymethylpentene, copolymers of monomers of ethylene and methylpentene, polyesters, polyamides, polystyrene, fluoropolymers, olefinic ionomer resins, random co-polymers of ethylene and methacrylic acid, and random co-polymers of ethylene and vinyl acetate, and the second polymer component is a single polymer selected from the group consisting of polyolefin and polyester;

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the second fibrous layer comprised of at least 95% by weight of second layer fibers having an average effective diameter that is greater than the average effective diameter of the meltblown fibers of the first fibrous layer.

25. The sheet according to claim 24, wherein the polymers of the first polymer component consist of from 5% to 95% by weight of the first polymer and from 95% to 5% by weight of the second polymer.

26. The sheet according to claim 25, wherein the polymers of the first polymer component consist of from 10% to 90% by weight of the first polymer and from 90% to 10% by weight of the second polymer.

27. (Canceled).

28. The sheet according to claim 26, wherein the first and second polymers are selected from the group consisting of polyethylene, polymethylpentene, copolymers of monomers of ethylene and methylpentene, and polyesters and the second polymer component is selected from the group consisting of polyolefins and polyesters.

29. The sheet according to claim 28 wherein the polyester is selected from the group consisting of poly(ethylene terephthalate), poly(trimethylene terephthalate), and poly(butylene terephthalate).

30. The sheet according to claim 29, wherein the first polymer is polyethylene, the second polymer is poly(butylene terephthalate), and the second polymer component is poly(ethylene terephthalate).

31. The sheet according to claim 26 wherein the multiple component meltblown fibers are bicomponent fibers and the second fibrous layer is a spunbond layer.

32. The sheet according to claim 31 wherein the spunbond layer comprises bicomponent spunbond fibers.

33. The sheet according to claim 32 wherein the polymer components of the meltblown fibers are arranged in a side-by-side configuration and the spunbond fibers are sheath-core fibers.